

Solvay to Highlight Comprehensive Material Portfolio for Aerospace at Aircraft Interiors Expo (AIE) Americas

SEATTLE, Wash., October 14, 2014 — Solvay Specialty Polymers will showcase its extensive portfolio of high-performance polymers for the aerospace industry at the Aircraft Interiors Expo (AIE) Americas exhibition (Booth 313), October 14-16 in Seattle, Wash. Among the company's key material offerings for aerospace and advanced transportation applications is Radel® PPSU foam, the industry's first thermoformable polyphenylsulfone (PPSU) foam for insulative and structural components used in aircraft interiors.

Solvay has successfully introduced Radel® PPSU thermoplastic foam as a disruptive technology for the production of lightweight structures for commercial aircraft interiors. As an alternative core material to honeycomb, Radel® PPSU foam lends itself to high productivity manufacturing of sandwich structures with consistent quality at attractive economics. Lightweight thermoplastic sandwiches using Radel® foam core have triggered various design and processing innovations, including one-step, short cycle time thermoformed sandwich parts with reduced finishing labor, resulting in reduced cost and improved shop floor productivity. High-performance PPSU foam is based on Solvay's Radel® PPSU, a super-tough thermoplastic resin used for over 20 years in structural and decorative aircraft interior applications. Radel® PPSU foam is used in commercial applications in the Airbus A350 aircraft and the Solar Impulse 2 airplane.

"Solvay's growing portfolio of high-performance technology platforms is meeting the increased demand for materials that are light, strong, and rigid and that can also be recycled," said Armin Klesing, business development manager, aerospace and composites, for Solvay Specialty Polymers. "Armed with unique cutting-edge material solutions which provide superior performance and cost advantages, we are firmly positioned as a strategic partner to our customers in this important segment."

Solvay's broad portfolio for the aerospace market includes tougheners and thermoplastic resins, films, and foams targeted for structural, interior, cargo, and ducting applications. For cores and ducting, Solvay will also highlight Solef® PVDF foam which can be molded into complex 3-D shapes that offer excellent flame/smoke/toxicity (FST) performance, toughness, resiliency, excellent resistance to aerospace fluids, and mechanical properties to 120°C (248°F). Solef® 3-D molded foam also permits the production of parts with zero scrap and eliminates the need for interior insulation.

Solvay will discuss the use of Ajedium™ Films made from engineering polymers, fluoropolymers, and other high-performance polymers for production of thermal acoustic insulation blankets. Films made using ethylene chlorotrifluoroethylene (ECTFE), polyvinylidene fluoride (PVDF), polyetheretherketone (PEEK), and polyaryletherketone (PAEK) provide uniform release from composites and other substrates under pressure, heat, or other demanding conditions. Lightweight Halar® ECTFE film is used in the Solar Impulse airplane to weather-proof photovoltaic cells without compromising light transmission.

Solvay's comprehensive offering for the aerospace industry also includes Virantage® polyethersulfone (PESU) tougheners for thermoset structural composites. This product line offers the industry's broadest range of high-performance tougheners which are optimized for hydrolytic stability, impact resistance, and fast dissolution in epoxy matrices to achieve excellent mechanical performance of composites at reduced processing times.

Rounding out Solvay's comprehensive offering for aerospace are a range of thermoplastic resins including KetaSpire® PEEK, which combines outstanding chemical resistance and long-term thermal and mechanical stability

with excellent strength, stiffness, and fatigue resistance, and AvaSpire® PAEK, a versatile family of polymers tailored to provide new and unique combinations of thermal, mechanical, and chemical performance while exhibiting superior processing characteristics compared to PEKKEK and PEK. Through fiber loading and mixed composite/overmolding techniques, Solvay's KetaSpire® PEEK and AvaSpire® PAEK compounds push fiber-reinforced molding materials ever closer to composites while ensuring simpler processing and cost savings. Typical applications are fixtures and clips.

Torlon® polyamide-imide (PAI) offers the highest strength and stiffness of any thermoplastic up to 275°C (527°F) and has outstanding resistance to wear, creep, and chemicals, allowing it to replace metal for use in lightweight, non-corrosive fasteners. Meanwhile, Ixef® polyarylamide (PARA) provides a unique combination of strength and aesthetics, making it ideal for complex parts that require both overall strength and an excellent surface finish. The material is available for seat components such as arm rests.

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About Solvay Specialty Polymers

Solvay Specialty Polymers manufactures over 1500 products across 35 brands of high-performance polymers – fluoropolymers, fluoroelastomers, fluorinated fluids, semi-aromatic polyamides, sulfone polymers, aromatic ultra polymers, high-barrier polymers and cross-linked high-performance compounds – for use in Aerospace, Alternative Energy, Automotive, Healthcare, Membranes, Oil & Gas, Packaging, Plumbing, Semiconductors, Wire & Cable, and other industries. Learn more at www.solvay.com.

Solvay (www.solvay.com) is an international chemical Group committed to sustainable development with a clear focus on innovation and operational excellence. It is realizing over 90% of its sales in markets where it is among the top 3 global leaders. Solvay offers a broad range of products that contribute to improving quality of life and the performance of its customers in markets such as consumer goods, construction, automotive, energy, water and environment, and electronics. The Group is headquartered in Brussels and its companies, which employ about 29,400 people in 56 countries, generated EUR 9.9 billion in net sales in 2013 (pro forma). Solvay SA is listed as **SOLB** on NYSE Euronext (www.euronext.com) in Brussels and Paris. Bloomberg (www.bloomberg.com) = **SOLB:BB** and Reuters (www.reuters.com) = **SOLB.BR**.

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